

slide. Place a drop or so of water where the gamboge has been rubbed. Gently push the edge of a cover glass up to the gamboge; with suitable illumination the whole field is seen in very brisk motion.

FRESH WATER DIATOMS AND THEIR PREPARATION

Groom (Eng. Mech., March, 21, 1913) invites the microscopist to the study of the Diatoms. He quotes: "Contemplation of the netted beauty of some small part of nature may bring man, as he grows older, the admiration of a vision of the whole," and thus advises: Go to a pond, collect a quantity of Pond weed. Wash this by shaking thoroughly in, say a wide-mouthed 2-pound jar nearly filled with water. Pick out all of the weeds possible, shaking to free them of the diatoms. Allow to settle for two hours and pour off all the water possible. Put the sediment into a saucer with a fair quantity of water and place it in a sunny window. Next morning take a fine piece of muslin big enough to cover the saucer; soak it, wring it out, place it over saucer; press it down so that it rests lightly on the surface of the sediment. After a time the free diatoms will make their way through the meshes of the muslin and discolor it. The diatoms are thus collected on the upper surface of the muslin free from the sandy debris. They can be mopped from the muslin into clear water with a camel's hair brush.

MOUNTING FRESH-WATER ALGAE

English Mechanic (Nov., 1912) makes the following suggestions for beginners. For unicellular algæ (diatoms, desmids, etc.), remove as much water as possible from them with a pipette, transfer to a watch glass of filtered rain water or clear water of the kind they live in. Carefully stir up the sediment, allow to settle, remove the water and the very surface of the sediment with a pipette. Repeat this process until a supply has been obtained freed from the sand and mud. Remove water and add a fluid made up of alcohol, 3 parts, water 2 parts, and glycerine 1 part. Stir the specimens well and leave it in an open watch-glass for 10 days or more until the alcohol and water are evaporated—*nearly* covering the vessel to keep out foreign dirt. Do not use heat to hasten evaporation. Mount in warm, not *hot*, glycerine jelly.